WHAT IS CLAIMED IS:

1. A purified or isolated peptide, wherein the peptide is

a) a cartilage intermediate layer protein (CILP),

b) an analog of a CILP,

c) a homolog of a CILP, or

d) a fragment of a CILP, an analog of a CILP, or a homolog of a CILP, wherein the fragment is immunoreactive with at least one antibody that is specific for a CILP, an analog of a CILP, or a homolog of a CILP.

~~2. The peptide of claim 1, wherein the peptide is a mammalian peptide.~~

~~3. The peptide of claim 2, wherein the peptide is a human peptide, a dog peptide, a cat peptide, or a rodent peptide.~~

4. The peptide of claim 1, wherein the peptide is a protein.

5. The peptide of claim 1, wherein the peptide is a recombinant peptide.

6. The peptide of claim 1, wherein the peptide is isolated from chondrocyte-containing tissues.

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7. The peptide of claim 1, wherein the peptide is

a) a CILP comprising the amino acid sequence of SEQ ID NO:2,

b) an analog of a CILP comprising the amino acid sequence of SEQ ID NO:2,

c) a homolog of a CILP comprising the amino acid sequence of SEQ ID NO:2, or

d) a fragment comprising a sequence that is immunoreactive with at least one antibody that is specific for a CILP comprising a the amino acid sequence of SEQ ID NO:2, a sequence that is present in an analog of a CILP comprising the amino acid sequence of SEQ ID NO:2, or a homolog of a CILP comprising the amino acid sequence of SEQ ID NO:2.

8. The peptide of claim 1, wherein the peptide is a protein comprising the amino acid sequence of SEQ ID NO:2.

9. A purified or isolated polynucleotide comprising a sequence encoding

a) a cartilage intermediate layer protein (CILP),

b) an analog of a CILP,

c) a homolog of a CILP, or

d) a fragment of a CILP, an analog of a CILP, or a homolog of a CILP, wherein the fragment is immunoreactive with at least one antibody that is specific for a CILP, an analog of a CILP, or a homolog of a CILP.

10. The polynucleotide of claim 9, wherein the polynucleotide comprises a nucleotide sequence that encodes a CILP.

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11. The polynucleotide of claim 10, wherein the polynucleotide further comprises a nucleotide sequence encoding a nucleotide pyrophosphohydrolase.

12. The polynucleotide of claim 9, wherein the polynucleotide comprises a sequence that encodes

a) a CILP comprising the amino acid sequence of SEQ ID NO:2,

b) an analog of a CILP comprising the amino acid sequence of SEQ ID NO:2,

c) a homolog of a CILP comprising the amino acid sequence of SEQ ID NO:2, or

d) a fragment comprising a sequence that is immunoreactive with at least one antibody that is specific for a CILP comprising a the amino acid sequence of SEQ ID NO:2, a sequence that is present in an analog of a CILP comprising the amino acid sequence of SEQ ID NO:2, or a homolog of a CILP comprising the amino acid sequence of SEQ ID NO:2.

13. The polynucleotide of claim 12, wherein the polynucleotide encodes a protein comprising the amino acid sequence of SEQ ID NO:2.

14. The polynucleotide of claim 12, wherein the nucleotide sequence comprises the sequence of SEQ ID NO:1.

15. A vector comprising the polynucleotide of claim 9.

16. A recombinant cell comprising the vector of claim 15.

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~~17. A recombinant cell comprising the polynucleotide of claim 9~~

18. A recombinant cell comprising the peptide of claim 1.

19. An oligonucleotide comprising at least 10 consecutive nucleotides of SEQ ID NO:1.

20. An antibody that specifically binds to a CILP, an analog of a CILP, or a homolog of a CILP.

21. The antibody of claim 20, which is a monoclonal antibody.

22. The antibody of claim 20, which is a polyclonal antibody.

23. A pharmaceutical composition comprising

a) a cartilage intermediate layer protein (CILP),

b) an analog of a CILP,

c) a homolog of a CILP, or

d) a fragment of a CILP, an analog of a CILP, or a homolog of a CILP, wherein the fragment is immunoreactive with at least one antibody that is specific for a CILP, an analog of a CILP, or a homolog of a CILP.

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24. The pharmaceutical composition of claim 23, further comprising an acceptable physiological carrier.

25. A method of treating individuals with a joint disease, said method comprising administering a CILP, CILP analog, or CILP homolog to an individual in an amount sufficient to achieve the intended response.

26. The method of treating of claim 25, wherein multiple administrations are used to achieve the intended response.

27. The method of treating of claim 25, wherein the method treats at least one of the following disorders or diseases: osteoarthritis, rheumatoid arthritis, crystal deposit arthritis, psoriatic arthritis, and reactive arthritis.

28. A method of early detection of osteoarthritis (OA), said method comprising:

a) isolating joint tissue from an individual suspected of having OA;

b) detecting the amount of CILP, CILP analog, CILP homolog, or fragments of CILP, CILP analog, or CILP homolog; and

c) comparing the amount detected to an average amount detected in a similar sample obtained from joint tissue from individuals known not to have OA.

29. The method of claim 28, wherein the joint tissue is cartilage tissue.

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30. The method of claim 28, wherein the method detects at least a portion of a CILP using antibodies that specifically react with CILP or an antigenically active fragment thereof.

31. The method of claim 28, wherein the method detects messenger RNA encoding CILP or a portion thereof.

32. The method of claim 28, wherein the method detects an increase in fragments of a CILP in synovial fluid.

33. The method of claim 28, wherein the level of CILP, analog, homolog, or fragment is abnormally high in the individual as compared to the average.

34. A kit comprising:

a) at least one antibody that specifically reacts with

- a cartilage intermediate layer protein (CILP),
- an analog of a CILP,
- a homolog of a CILP, and/or
- a fragment of a CILP, an analog of a CILP, or a homolog of a CILP, wherein the fragment is immunoreactive with at least one antibody that is specific for a CILP, an analog of a CILP, or a homolog of a CILP, and

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b) some or all of the reagents and equipment necessary for detection of CILP, an analog of a CILP, a homolog of a CILP, or an immunogenic fragment of CILP or an analog or homolog of CILP, from a biological sample containing at least one of these molecules.

35. A kit comprising:

a) a cartilage intermediate layer protein in a physiologically acceptable carrier, and

b) some or all of the equipment and reagents necessary to administer the cartilage intermediate layer protein to an individual.

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